

CLAIMS:

1. In an idler pulley for supporting a conveyor belt, said pulley having a generally cylindrical center portion, wherein the improvement comprises: a stub shaft removably mounted to said pulley at each end thereof, said stub shafts being coaxially mounted with respect to said pulley and with respect to one another such that said stub shafts define an axis about which said pulley will rotate, each said stub shaft having a radially disposed flange fixedly secured thereto, said flange being removably mounted to said pulley.

2. The improvement of claim 1 wherein pulley includes a conical outer portion at each end of said center portion with each of said conical portions sloping outwardly of said center portion such that a conveyor belt supported on the upper surfaces of said pulley has a center portion disposed generally horizontally on said center portion and an outer margin supported on each of said conical portions such that said belt is trough-shaped.

3. The improvement of claim 1 wherein said pulley includes an end wall at opposite ends of said shaft; said stub shaft flanges being removably mounted to said end walls.

4. The improvement of claim 3 wherein said end walls are spaced inwardly from the ends of said shaft a depth approximately equal to the width of said stub shaft flange.

5. A conveyor having a pair of spaced supports, one or more idler pulleys journaled with respect to said supports and extending generally transversely with respect to said supports, said idler pulley having shaft end portion extending endwise

therefrom and a bearing assembly removably and adjustably mounted relative to said supports at each end of said pulley for rotatably supporting said idler pulley;

each said shaft end portion being removably mounted to said pulley and being substantially coaxially mounted with respect to said pulley and with respect to the shaft end portion attached to the opposite end of said pulley; and

each said shaft end portion having a radially disposed flange fixedly secured thereto and being removably secured to said pulley.

6. The conveyor as set forth in claim 5 wherein each said shaft end portion is a stub shaft.

7. The conveyor as set forth in claim 5 wherein said conveyor is housed within an elongate housing, said supports being at opposite sides of said housing, said housing including at least one access panel in a side wall thereof proximate one of said bearing assemblies, said access panel being removably mounted with respect to said housing so as to provide access to a respective said bearing assembly thereby to facilitate the ready removal of said bearing assembly for said support.

8. The conveyor as set forth in claim 7 wherein after said bearing assembly has been removed, said flange may be removed from said pulley thereby to facilitate replacement of said shaft end portion without having to remove the idler pulley or the shaft end support at the opposite end of said idler pulley.

9. A conveyor having a pair of spaced supports, one or more idler pulleys journaled with respect to said supports and extending generally transversely with respect to said supports, said idler pulley having shaft end portion extending endwise therefrom and a bearing assembly removably and adjustably mounted relative to said supports at each end of said pulley for rotatably supporting said idler pulley;

each said shaft end portion being removably mounted to said pulley and being substantially coaxially mounted with respect to said pulley and with respect to the shaft end portion attached to the opposite end of said pulley; and

each said shaft end portion having a radially disposed flange fixedly secured thereto and being removably secured to said pulley.